Claims

1. Rotational pump (10) with variable volume flow, comprising a pump housing (20) having a suction connection (44) and a pressure connection (46), an outer rotor (30) with inner toothing which is rotatably disposed inside the housing, and an inner rotor (28) with outer toothing which is eccentrically disposed in the outer rotor, and which can be driven by a drive shaft (26) which is disposed in the pump housing (20) parallel to the axis of the outer rotor (30), wherein a rotatable adjusting ring (22), in which the outer rotor (30) is eccentrically and rotatably disposed, is provided coaxially to the drive shaft (26) to change the volume flow in the pump housing (20), characterized in that a slider (58) is disposed, as viewed in the turning direction, between the pressure connection (46) and the suction connection (44) to change the size of at least one of the connections (44 and 46).

2. Rotational pump according to claim 1, characterized in that the size of both connections (44 and 46) is changed.

3. Rotational pump according to claim 2, characterized in that the size of one connection (44 and 46) is increased by the same amount as that of the other connection (46 or 44) is decreased.

4. Rotational pump according to any one of the preceding claims, characterized in that the pressure connection (46) and the suction connection are formed, at least in sections, as a groove (50) having the shape of a partial circle.

5. Rotational pump according to claim 4, characterized in that the slider (58) is displaceably disposed in the groove (50).

6. Rotational pump according to any one of the preceding claims, characterized in that the slider (58) separates the pressure connection (56) from the suction connection (54).

7. Rotational pump according to any one of the preceding claims, characterized in that the slider (58) is formed as a sliding block (60).

8. Rotational pump according to any one of the preceding claims, characterized in that the slider (58) is driven via the adjusting ring (22).

9. Rotational pump according to any one of the preceding claims, characterized in that the slider (58) is directly connected to the adjusting ring (22).

10. Rotational pump according to any one of the claims 1 through 8, characterized in that the slider (58) is connected to the adjusting ring (22) via a transmission.

11. Rotational pump according to any one of the preceding claims, characterized in that the slider (58) is formed on the adjusting ring (22).

12. Rotational pump according to any one of the preceding claims, characterized in that the slider (58) is provided on a slider plate (16) which abuts the front end of the adjusting ring (22).

13. Rotational pump according to claim 12, characterized in that a lid (80) extends above the slider plate (16).

14. Rotational pump according to claim 13, characterized in that the pressure connection (46) and the suction connection (44) are provided in the lid (80).

15. Rotational pump according to any one of the claims 12 through 14, characterized in that the slider plate (16) and the adjusting ring (22) are formed of one piece.

16. Rotational pump according to any one of the preceding claims, characterized in it has a modular construction.